

The U.S. Environmental Protection Agency's National Enforcement Investigations Center Probing into the Future

John H. Brown

Physical Science Technician

U.S. EPA Office of Enforcement and Compliance Assurance (OECA)/Office of Criminal
Enforcement, Forensics and Training (OCEFT)/National Enforcement Investigations Center
(NEIC)

(303) 462-9267

Brown.JohnH@EPA.GOV

Authors: John H. Brown

U.S. EPA OECA/OCEFT/NEIC

Keywords: AMS Power Probe with dual-tube technology, subsurface geophysical
investigations, trichloroethylene (TCE), groundwater, sampling

The U.S. Environmental Protection Agency's (U.S. EPA) National Enforcement Investigations Center (NEIC) collaborated with Region 8 and their Superfund Technical Assessment and Response Team (Start) contractor, URS Corporation, to install multiple deep groundwater monitoring wells using the NEIC's AMS Power Probe Model 9600EC. The NEIC's Power Probe uses advanced direct-push, dual-tube technology, which allows the installation of deep groundwater monitoring wells and allows for the collection of two or four-foot soil core samples while probing to the desired depth. The NEIC Power Probe with its dual-tube system permits discrete sampling at varying depths, maintains the structural integrity of the borehole, and allows for the rapid installation of fully functioning deep or shallow groundwater monitoring wells. The Power Probe is also capable of soil gas and/or ground water sampling without the installation of wells. This is accomplished using the inner drive rods only with special tips and the sample being collected through the core of the inner rod. The NEIC and URS efforts resulted in the successful implementation of several groundwater monitoring wells from 46 to 52 feet deep, as well as the collection of approximately six 4-foot soil cores from each borehole at depths between 26 to 50 feet. The ongoing collaboration supports the environmental investigation/monitoring of the trichloroethylene (TCE) plume in Denver, CO, and the possible effect on the surrounding neighborhood. The Power Probe is operated by NEIC employee John H. Brown, Jr.